

NH MEDICAL CONTROL BOARD

**NH Fire Academy
Concord, NH**

MINUTES OF MEETING

May 17, 2007

Members Present: Donavon Albertson, MD; Tom D'Aprix, MD; Chris Fore, MD; Patrick Lanzetta, MD; Jim Martin, MD; Douglas McVicar, MD; Sue Prentiss, Bureau Chief

Members Absent: Frank Hubbell, DO; MD; Jeff Johnson, MD; Joseph Mastromarino, MD; William Siegart, DO; John Sutton, MD; Norman Yanofsky, MD

Guests: Steve Erickson, Jeanne Erickson, Doug Martin, Michael Pepin, Chris Sandborne, Shawn Brechtel, David Tauber, Jonathan Dubey, David Dubey, Gary Zirpolo, Janet Houston, 2 members of Pelham Fire Department.

Bureau Staff: Vicki Blanchard, ALS Coordinator, Kathy Doolan, Field Services Coordinator; Clay Odell, Trauma Coordinator; Eric Perry, Education Coordinator; Michelle Duchesne, Program Specialist

I. CALL TO ORDER

Item 1. McVicar called the meeting of the NH Medical Control Board (MCB) to order on May 17, 2007 at the New Hampshire Fire Academy, Concord, NH. 09:05 AM.

Introductions were conducted.

II. ACCEPTANCE OF MINUTES

Item 1. **March 15, 2006 Minutes** were approved unanimously.

Item 2. EMS Community. A thank-you was received from Joe Mastromarino. He is doing well, following his recent surgery.

Prentiss asked for a moment of silence for Bruce McKay, Franconia police officer and EMT who was killed in the line of duty earlier this week.

III. DISCUSSION AND ACTION PROJECTS

Item 1. Intraosseous (IO) Infusions: Blanchard presented data on IO infusion per the board's request from the March 2007 meeting. At a prior meeting a concern was raised that IO is being used as a default IV, replacing standard

peripheral venous cannulation. Therefore, the board was interested in learning how often IOs were used, on what type of patients, and whether IV attempts were being made prior to the IOs.

Blanchard presented the board with a summary (see attached) which included all 70 calls reporting IO in the TEMSIS system since January 1, 2006. 12 Units accounted for all uses of IO devices. The majority of the uses were for patients in cardiac arrest. Of those patients not in cardiac arrest, IV attempts were performed on all patients with the exception of 3.

Blanchard concluded that the IO devices were being used appropriately and the board concurred.

The board did discuss the benefits of TEMSIS in setting EMS policy. Often concerns are raised based on anecdote, sometimes a single case. TEMSIS can demonstrate whether the concerns reflect accurate information. If a problem does exist, TEMSIS can help pinpoint how widespread it is, and in what settings it is occurring.

Item 2. Medicated Assisted Intubations (MAI): Again at the request of the MCB from the March 2007 meeting, Blanchard was to research the data regarding medicated assisted intubation. A concern was brought to the board's attention in March that services were using benzodiazepines in lieu of RSI.

Blanchard presented the board with a summary (see attached), that reported 10 cases where Units had sedated patients with benzodiazepines in order to facilitate intubation since the September 21, 2006 vote by the MCB specifically stating that MAI is not within the scope of practice for prehospital providers in New Hampshire. Of these 10 cases, only 3 had been performed since the protocol rollouts this past winter. Blanchard further presented the board with the conundrum as to how best to communicate changes in the protocols and/or other aspects of prehospital practice so as to best reach all providers. Blanchard did point out that MCB minutes are posted on the Bureau of EMS's website and the Bureau Chief sends out bi-monthly reports to Unit leaders, however she felt the information is not always reaching the individual providers. Suggestions were made to post bulletins concerning important practice-related information on the TEMSIS initial screen. Another idea was a mass email notification. Prentiss stressed the importance of the Medical Control Board relaying the information back to other medical directors. D'Aprix pointed out that although a vote was made to not include MAI within the scope of practice for NH EMS, it has never been part of NH EMS protocols, nor was it ever within the scope of practice, so notification or not, providers should not have been performing it.

At the conclusion, Blanchard was asked to do another study in 6 months, to be sure that the communication means we use are effectively getting messages through to providers.

Item 3. RSI Prerequisites – State of the Art of RSI in NH: D'Aprix reported that on April 2, 2007 the medical directors from the currently waived RSIs units (Concord Fire, Derry Fire, DHART, and Frisbie) were invited to a meeting to come up with a consensus for RSI prerequisites which would be amenable for

them. Dr. Anthony from Frisbie, Dr. Wagner from Parkland, Dr. Yanofsky from DHART, Dr. D'Aprix and Dr. Martin from the MCB, and Prentiss and Blanchard from the Bureau of EMS were present. (Fore from Concord was unable to attend). At this meeting a set of RSI Prerequisites were drafted (see attached).

D'Aprix then went over each element of the prerequisite. At the conclusion of the prerequisite summary the elements of the proposal were discussed. The most discussed proposal was a requirement that RSI only be performed if a 2 paramedic crew was on scene.

Fore stated that in Concord a 2 paramedic crew would create a personnel issue, staffing with two medics may occur, but is not always possible. Additionally, with outlying towns needing an intercept as far as 45 minutes away, 2 paramedics are not sent.

Prentiss added that it not just in Concord that a 2 paramedic crew requirement would tie up resources for the community.

Pepin stated that a 2 paramedic crew was not required for cardiac arrests, surgical airways or pediatric arrests, all situations where multitasking is necessary.

Albertson agreed with Pepin but pointed out that in RSI a patient with high probability to survive is selected and a procedure is performed that has the potential to cause great harm.

Zirpolo suggested the possibility of a special RSI team consisting of an RSI paramedic plus a basic or intermediate with advanced training by a special module designed to optimize support for the RSI medic. This brought further discussion and support from Lanzetta and D'Aprix.

Jim Martin stated that he felt that the term "advanced airway training" was an insult, because we already train our providers in advanced airway skills.

Doug Martin stated that the training should involve more than our advanced airway training, it should include an understanding of the RSI process, cricoid pressure, capnography and other RSI specific monitoring etc. The program should be available for all surrounding communities where paramedic intercepts are likely to occur.

Prentiss reminded all that in order for RSI to work for any unit, a commitment from the Medical Resource Hospital, Medical Director and Unit head was necessary. Training resources would need to be committed, as well as quality management.

D'Aprix moved to increase the paramedic experience from 1 year to 2 years and 5 or more successful live intubations, and to amend the resources from a 2 paramedic crew to 1 paramedic and 1 EMT crew with the additional training module." Albertson 2nd. Vote: Yes 4, No 1, Abstain 1. Vote Passed

McVicar stated that the training module and quality management piece needed to be created before the prerequisite for RSI could go into place. He asked

Blanchard if she could have a training and quality management piece available for review at the July meeting. Blanchard stated that she and Doug Martin would work on it.

Item 4 Protocol Planning 2009: McVicar stated that this is the planning stage of the two year protocol cycle, so he would like to hear the board members' ideas for the 2009 protocols. Going around the table, each member spoke.

McVicar: Would like to add to protocols a disclosure statement of the sources of individual protocols. For example many protocols are based on American Heart Association ACLS. Some are based on other national standards. Some rest on a specific medical literature, which can be cited. Others are traditional with no clear evidence base. McVicar feels that stating this would prompt us to update protocols as literature or standards change, and to try to find an evidence base if there is none. However, he admitted this may be easier said than done.

Albertson: In his Emergency Medicine Fellowship 25 years ago, his first patient came via a hearse. Through the years and in the real world incremental changes are how things have evolved. He likes the rhythm and flow we have established and would like to continue. He suggested further work on quality management.

Fore: Would like to see comprehensive case-based airway training. The protocols do not need radical change, but will need small amendments as new things occur.

Lanzetta: Agreed with small steps as they become necessary, nothing major indicated right now. Additionally, would like to focus on the reality of what is EMS practice in New Hampshire, now that we have in TEMSIS a way to know that reality.

Martin: Wants to focus on the nuts and bolts of the protocols, cleaning up the document. Additionally, Martin would like to develop a hypothermia protocol for cardiac arrest. Others stated interest in hypothermia as well.

D'Aprix: Reduce errors found in the protocols after publishing. He suggests releasing the document earlier to the public to help find the errors. Also he would like to work on a treat and release protocols for hypoglycemia.

Hubbell: (not present but sent an email to McVicar): Update the Wilderness Medicine/Extended protocol. McVicar commented that if the MCB decides to issue new Wilderness/Extended Care protocols, then there will be a second decision about whether we should incorporate them into the main body of the protocols or leave it as a stand-alone document.

Item 5: Medical Control Festival: McVicar stated that as always, he is concerned that half the hospitals in the state have no representation on the MCB. Twice in the past we have asked hospital EMS medical directors statewide to come to a meeting to discuss protocol and EMS policy issues. McVicar asked the board if this is a worthwhile way to seek input from a broader statewide base.

Fore stated that he found the meeting helpful but noted that it is always difficult to get good attendance.

There was a brief discussion regarding an partnering with ACEP as we did successfully 2 years ago, or attaching an EMS session to an already planned ACEP meeting.

After some discussion the board decided that direct phone calls, via a buddy system, would probably be a more efficient method for getting input. McVicar and Blanchard set up a call list that pairs each MCB member with one or more EMS medical directors at other hospitals. The idea is to have MCB physicians reach out to their contacts in neighboring hospitals, seek planning information and establish a "pipeline." At the July meeting we will use the information gleaned as a basis of our planning discussion.

Item 6: Peripheral IVs in the Lower Extremities: Blanchard explained that there was conflicting information within the EMS community as to whether or not an intermediate could obtain peripheral venous access via a lower extremity vein.

D'Aprix moved, "that the lower extremities is considered a peripheral IV site." Fore 2nd. Vote unanimous. Vote Passed.

IV. INCUBATING PROJECTS & SUBCOMMITTEE REPORTS

ACEP: No Report

Bureau and Division Update: See attached.

Albertson asked who has oversight of water rescues? Prentiss stated if a water craft were used routinely to provided patient care it would need to be licensed, however if it were a piece of rescue equipment, like a stokes basket or ropes, needed to rescue someone, it would not need to be licensed. Albertson asked who is the agency that over sees the rescues; Fish and Game? Prentiss stated it depended on the circumstances.

Coordinating Board Update: Doug Martin reported the current projects of the Coordinating Board:

- National Registry RTP Challenge. An EMT may challenge his/her refresher training by taking the National Registry's written examination. The Coordinating Board would support the challenge, however the EMT's continuing education and practical requires would still be necessary to re-register.
- Pediatric Education: Houston completed a survey on pediatric education and skill. The survey revealed a lack of actual pediatric skills. This is something that will be tied into our quality management project.
- Blood Draw for Accidental exposure: The board continues to follow to ensure EMS has access to blood borne pathogen exposure information.

- Region IV Diversion: Achilles and Martin are working with Region IV on some diversion concerns. A summit is planned to look at Region III's diversion plan as a model.
- Death Benefit bill: Prentiss will speak on later.
- New Member: Dr. David Strang is replacing D. McVicar as the representative of the NH Medical Society.

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Legislative update SB169, SB202: Prentiss stated that SB202, which would provide a lifetime license to certain long-time EMS providers, was voted inexpedient to legislate. This effectively kills the bill. SB169, the Public Safety Provider Death Benefit bill: In March the bill was amended to include EMS and sent to a feasibility study. Fire and Police have service delivery models that are straight forward and similar across the state, whereas EMS has 7 models. Which EMS providers, under which models need to be determined. The EMT, Paramedic, and Ambulance Associations guided by longtime EMS supporter, and former Senator, David Currier worked with the House and ED&A committee for inclusion of EMS providers in the benefit program. Questions were raised as to how it would be paid for. Others have tried to join in including schools, correction officers and highway workers. To avoid complicating the bill and endangering its passage, a plea was made by some supporters to take out EMS and pass with Fire and Police only. Prentiss stated that she heard on the news that there was some floor action yesterday, but does not know what; however it did not sound like EMS was included. The bill is by no means finished, there is still a chance to add EMS providers. But at this point it looks like a study committee on the question of EMS providers -- which would at least keep the door open -- is more likely than outright, immediate passage with EMS included.

NH Trauma System: Odell reported that the Air Medical Transport Utilization Review continues with version 2. The Annual Trauma Conference planning has begun. Laerdal Sim-Man® Project: A beta training session was tried at Weeks recently, further are being planned with a priority on the critical access and rural level III hospitals. As Prentiss already mentioned in the Bureau Report, funding for the Trauma registry is exciting, but implementation and additional details will need to be investigated, while also considering political issues. Revising the state's trauma plan is currently underway. In the fall open Town Meetings will be planned to gather input before completion of the document.

TEMSIS: Duchesne presented the board with tables reflecting "top-ten" data. (See attached) The board questioned some of the data points, which Duchesne explained were necessary for NEMSIS compliance.

Other Business: Albertson inquired about an old item, which has remained unresolved for approximately 5 years. Is automatic location identification available to the Bureau Emergency Communication when calls are placed by cell

phone? If so, is this information low accuracy (ie. by triangulation) or high accuracy (ie. by GPS). Fore stated he was under the impression that cell phones can be located to within 3 meters, but no one was able to give the board, accurate up to date information. McVicar suggested we invite E911 to our lunch break at an upcoming meeting.

McVicar had an email from Yanofsky regarding "IV drip controllers" that utilize gravity flow, but have a more advanced rate control valve than the standard IV rolling clamp controller. Would the board would entertain its use in place of a pump for those protocols that require a pump? McVicar stated he could find no literature on it. Doug Martin pointed out that the device was gravity driven and susceptible to positioning, just like any other IV not controlled by a pump. Albertson stated he would not be in favor, he would see this as a reduction in level of care. McVicar concluded the burden of proof would rest with the new device, and at this time there is not enough information. The board declined to change their decision regarding IV pumps.

V. ADJOURNMENT

Motion by D'Aprix, seconded by Fore to adjourn. Approved. Meeting adjourned at 12:00

VI. NEXT MEETING

July 19, 2007 in Plymouth, NH.

Respectfully Submitted,

Suzanne M. Prentiss, Bureau Chief, EMS

(Prepared by Vicki Blanchard, ALS Coordinator)

Intraosseous Use Summary
Medical Control Board
May 17, 2007
Reports from January 1 2006 – April 5, 2007

Total: 70

Units Involved: Bedford, Belmont, Claremont, Concord, Derry, Exeter, Franklin, Frisbie, Hartford, Lebanon, Stewart's and TriTown.

Provider Impressions:

Cardiac Arrest (Adult, Child & Infant)
CHF
Hyper & Hypoglycemia
AAA
Seizure
Breathing Difficulty
AMS/fall
Unresponsive
Trauma/MVC

Success Rate:

1 Attempt: 91% (64)
2nd Attempt: 3% (2)
Unsuccessful 6% (4)

IO Use to Provider Impression:

Adult Arrest: 42
Child Arrest: 4
Infant Arrest: 8
CHF: 4
Other: 12

IV Attempted before IO:

Adult Arrest: 67% (28)
Child Arrest: 25% (1)
Infant: 0% (0)
CHF: 100% (4)
Other: 75% (9)

Medicated Assisted Intubations
Summary for Medical Control Board
September 22, 2006 – May 14, 2007

Search Criteria: Diazepam, Lorazepam, Midazolam and Endotracheal Intubation

Total Medicated Assisted Intubations: 10

Units: Concord Fire, Derry Fire, Exeter Hospital P.I., New London, Penacook, Woodsville

Age range: 40 -99

Gender: Male: 3
Female: 6
NA: 1

Chief Complaint:

- CVA
- Chest Pain/Pressure
- CHF/Cardiac Arrest
- Overdose
- Respiratory Distress X3
- Traumatic Injury
- Unresponsive X2

Medications given:

Diazepam X1
Lorazepam X2
Versed X7

Narrations:

- Concurred with Newport medic that ETT was in order (Versed)
- Versed while setting up succ. Pt. into resp. arrest, ETT, additional versed
- Valium 5mg IVP to facilitate pt. control and airway management
- Versed 2mg for sedation
- 2.0mg Versed was admin IV to facilitate ET
- A transfer, pt. intubated prior, "pt started to clamp on tube" (Versed)

- Some sedation provided (Versed)
- IV Fentanyl and Versed were given to facilitate intubation
- Ativan for sedation
- Pt started fighting the tube. 2mg Versed adm IVP

RSI Summary

Concord Fire, Derry Fire and Frisbie
January 1 – March 31, 2007

Total RSI's: 12

Age range: 17 – 82

| | | |
|---------|--------|---|
| Gender: | Male | 8 |
| | Female | 4 |

| | | |
|-----|--------------|---|
| CC: | Unresponsive | 6 |
| | Head Injury | 1 |
| | AMS | 1 |
| | Seizure | 1 |
| | Trauma | 1 |
| | OD | 1 |

| | |
|---------|---|
| Trauma: | 3 |
| Medical | 9 |

ETT Attempts:

| | |
|-------------------------|----|
| 1 st attempt | 10 |
| 2 nd attempt | 1 |
| 3 rd attempt | 1 |
| Failed | 0 |

Reasons: 1 out of 2 documented reason for failed attempts: "Fluid in airway"

Airway Grading: 5 calls documented airway grading

Grade 1: 2

Grade 2: 2

"Grade 1 or 2": 1

On Scene Times Range: 4 – 23 (one call the ambulance pulled over enroute to RSI)

Average On Scene Time: 17.3

TEMSIS Report

Top Ten Leading Calls by Provider Impression

| Provider Impression | # of Calls | % of Calls |
|----------------------------|------------|------------|
| Traumatic Injury | 1,866 | 10.2% |
| Pain | 1,681 | 9.2% |
| No Apparent Illness/Injury | 1,514 | 8.3% |
| Chest Pain/Discomfort | 869 | 4.7% |
| Weakness | 841 | 4.6% |
| Other | 807 | 4.4% |
| Respiratory Distress | 750 | 4.1% |
| Unknown Problem | 431 | 2.4% |
| Other Illness/Injury | 422 | 2.3% |
| Abdominal Pain/Problems | 335 | 1.8% |

Top Ten Leading Calls by Cause of Injury

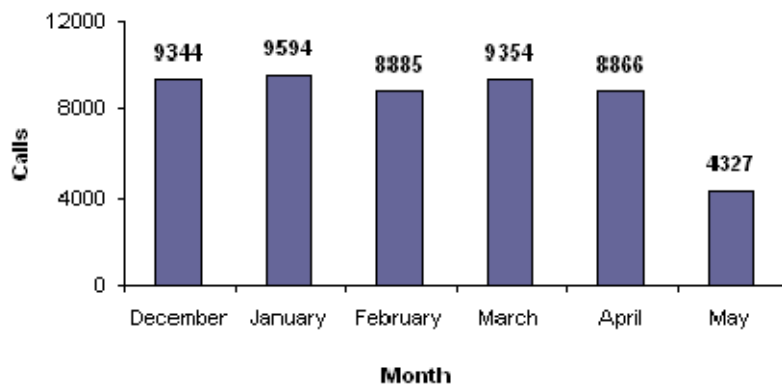
| Cause of Injury | # of Calls | % of Calls |
|------------------------------------|------------|------------|
| Unknown | 2,436 | 13.3% |
| Falls | 1,510 | 8.2% |
| Motor Vehicle Traffic Accident | 1,013 | 5.5% |
| Not Known | 192 | 1.1% |
| Other Injury | 189 | 1.0% |
| Struck by or Against | 159 | 0.9% |
| Motor Vehicle Non-Traffic Accident | 115 | 0.6% |
| Assault | 110 | 0.6% |
| Motorcycle Accident | 84 | 0.5% |
| Cut/Pierce | 80 | 0.4% |

Top Ten Leading Procedures Administered

| Procedure Name | # of Calls | % of Calls |
|---|------------|------------|
| Venous Access-Extremity | 5,534 | 30.2% |
| Assessment-Adult | 3,509 | 19.1% |
| Cardiac Monitor | 2,934 | 16.0% |
| Pulse Oximetry | 2,743 | 15.0% |
| Blood Glucose Analysis | 2,070 | 11.3% |
| Stretcher | 2,051 | 11.2% |
| Venous Access-Blood Draw | 1,331 | 7.3% |
| Spinal Immobilization - Long Back Board | 863 | 4.7% |
| 12 Lead ECG | 666 | 3.6% |
| Cervical Spinal Immobilization - Rigid Collar | 590 | 3.2% |

Number of Calls % Change, December 2006 - April 2007: -5.1%

*Figure 1. Number of Calls in the Last Six Months,
December 2006 - May 16, 2007*



Top Ten Leading Calls by Dispatch Reason

| Dispatch Reason | # of Calls | % of Calls |
|-----------------------------------|------------|------------|
| Traffic / Transportation Accident | 1,857 | 10.1% |
| Breathing Problem | 1,340 | 7.3% |
| Fall Victim | 1,117 | 6.1% |
| Chest Pain | 913 | 5.0% |
| Sick Person | 829 | 4.5% |
| Unknown | 788 | 4.3% |
| Other | 686 | 3.7% |
| Traumatic Injury | 623 | 3.4% |
| Unconscious/Fainting | 502 | 2.7% |
| Seizure/Convulsions | 398 | 2.2% |

Top Ten Leading Medications Administered

| Medication Name | # of Calls | % of Calls |
|------------------------------|------------|------------|
| Oxygen by Nasal Cannula | 3,452 | 18.8% |
| Normal Saline | 1,909 | 10.4% |
| Oxygen (non-rebreather mask) | 1,071 | 5.8% |
| Nitroglycerin | 931 | 5.1% |
| Aspirin (ASA) | 660 | 3.6% |
| Morphine Sulfate | 544 | 3.0% |
| Albuterol Sulfate | 509 | 2.8% |
| Oxygen | 413 | 2.3% |
| Fentanyl | 308 | 1.7% |
| Epinephrine 1:10,000 | 301 | 1.6% |

Patient Age

| Age | # of Calls | % of Calls |
|--------------------|-------------------|-------------------|
| Less Than 1 | 105 | 0.6% |
| 1 - 4 | 270 | 1.5% |
| 5 - 14 | 566 | 3.1% |
| 15 - 24 | 1,989 | 10.9% |
| 25 - 34 | 1,188 | 6.5% |
| 35 - 44 | 1,679 | 9.2% |
| 45 - 54 | 2,030 | 11.1% |
| 55 - 64 | 1,772 | 9.7% |
| 65 - 74 | 1,880 | 10.3% |
| 75 - 84 | 2,674 | 14.6% |
| 85+ | 1,926 | 10.5% |
| Unknown | 2,253 | 12.3% |
| Total | 18,332 | 100.0% |

Calls by Gender

| Gender | # of Patients | % of Calls |
|-----------------------|----------------------|-------------------|
| Female | 8,654 | 47.2% |
| Male | 7,561 | 41.2% |
| Not Applicable | 648 | 3.5% |
| Unknown | 1,469 | 8.0% |
| Total | 18,332 | 100.0% |